Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers	)	CC Docket No. 95. -185

REPLY COMMENTS OF RHYTHMS NETCONNECTIONS INC.

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SUMMARY

Section 251(d)(2) of the 1996 Act is not a codification of the essential facilities doctrine. The Commission should adopt "necessary" and "impair" standards that recognize the requisite nature and current availability, or lack thereof, of a "comparable" element in a competitively viable national wholesale market. The "necessary" and "impair" standards are distinct standards intended to address different criteria for the unbundling of network elements. A competitor is impaired when denial of access to an element causes more than a *de minimis* disadvantage to that carrier's ability to provide the service that it seeks to offer. In applying this standard, at a minimum the Commission should require ILECs to provide loops, including the features and functionalities of xDSL-capable loops, NIDs, transport facilities and OSS.

The Commission should order ILECs to unbundle the features and functionalities of local loops based on the different services carriers provide, including advanced services. The record evidence clearly demonstrates that the Commission must include loops on the minimum list of UNEs to be unbundled. The ILEC's unbundling requirements should include the provisioning of xDSL-capable loops. The Commission's loop definition should also include a solution to the digital loop carrier ("DLC") problem faced by data CLECs. Finally, the Commission's loop definition should require line sharing.

Access to unbundled transport is the only means by which competitors can obtain wide-spread availability of transport on timely, cost-effective and reasonable terms. There is no transport substitute that rivals unbundled ILEC transport in ubiquitous access, timeliness and cost.

Contrary to the ILEC's arguments, special access tariffs and expanded interconnection agreements do not provide comparable, cost-effective alternatives to unbundled transport.

Sporadic evidence of competitor use of alternative transport is not indicative of widespread availability. The Commission should reject attempts to deny competitors unbundled transport based on the ILEC's spurious claims of technically infeasibility.

Unbundled OSS is central to competitor's ability to offer services, and must be made available on an unbundled basis. OSS access is an unquestionably critical component of a data CLEC's operations. The OSS access that incumbents provide to competitors falls short of placing competitors on an equal footing with the incumbent. Specifically, DSL providers require access to ILEC systems in order to review key loop data. Real-time, electronic OSS access is critical for competitors to have an equal opportunity to compete.

The Commission should also find that ILECs must unbundle advanced services equipment in central offices, remote terminals and controlled environmental vaults in which competitors have been denied collocation of their own advanced services equipment, and require ILECs to make available combination of UNEs.

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Rhythms Netconnections Inc. ("Rhythms"), by its attorneys, respectfully submits these reply comments in the above-captioned proceeding[1] on the standards for identifying which network elements incumbent LECs must provide to competitors on an unbundled basis under Section 251(d)(2) of the Telecommunications Act of 1996 ("1996 Act").[2]

INTRODUCTION

Virtually all the comments filed in this proceeding recognize the critical nature of the Commission's identification of the network elements that incumbent local exchange carriers ("incumbent LECs" or "ILECs") must provide to new entrants on an unbundled basis. There is no dispute that in identifying which elements the ILECs must unbundle, the Commission must "consider" the "necessary" and "impair" standards of Section 251(d)(2) of the Act.[3] This provision directs the Commission to "consider at a minimum, whether—(A) access to such

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[1] Second Further Notice of Proposed Rulemaking, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996,* CC-Docket No. 96-98, FCC 99-70 (rel. April 16, 1999) ("Notice").

[2] Pub. L. 104-104, Title VII, Feb. 8, 1996, 110 Stat. 153, 47 U.S.C. 151 *et seq*. ("the Act" or "the 1996 Act").

[3] 47 U.S.C. § 251(d)(2).

network elements as are proprietary in nature is *necessary*; and (B) the failure to provide access to such network elements would *impair* the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer."[4] Clearly, the Commission's interpretation and application of these standards will have a direct and determinative impact on the development of competition envisioned by the 1996 Act.

The issue of how the unbundling requirements will influence local competition is where the parties diverge. Several of the incumbent LECs assert that competition has flourished in the last three years.[5] Yet, curiously, these same incumbents have simultaneously told Congress that consumers will not enjoy the benefits of advanced telecommunications services until the ILECs are deregulated. The ILECs cannot have it both ways. Either competition exists or it does not, and as explained below, there has been very little growth in competition. In an effort to maintain their dominant market positions, the ILECs seek to limit their unbundling obligations by claiming that requiring the unbundling of too many elements would discourage new entrants from investing in their own networks.[6] If the Commission were to adopt this position, it would paralyze the development of a robust competitive marketplace where carriers had equal access to the features and functionalities used in providing telecommunications services. In order for new entrants to access the same elements that the incumbents have been using for decades, the Commission must explicitly require the ILECs to provide them on an unbundled basis. For the past three years, the ILECs have successfully stunted the emergence of competition into their

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[4] 47 U.S.C. § 251(d)(2) (emphasis added).

[5] Ameritech Comments at 1-2; Bell Atlantic's Comments 3-5, 7-9; GTE Comments at 16; SBC Comments at 6.

[6] Bell Atlantic Comments 3-5, 7-9; GTE Comments at 16; SBC Comments at 6.

markets by delaying the implementation of the FCC's original UNE rules.[7] The ILECs' network elements are an integral part of any competitor's entry strategy, including facilities-based entry, because, new entrants must interconnect with ILEC networks, there is not yet a wholesale market for these elements, and the costs and delays inherent in self-provisioning are more than sufficient to frustrate the development of local competition.[8] Notwithstanding, the ILECs' protestations, unbundling of the ILECs' network will not lessen competitors' incentive to deploy their own facilities. To the contrary, competitors have an inherent and paramount incentive to find alternative sources for these features and functions in order to reduce their reliance on their primary competitors, the ILECs.[9]

Thus, the Commission should interpret and apply the "necessary" and "impair" standards under Section 251(d)(2) in light of the overriding goals of the 1996 Act, as well as the slow growth of local competition since the passage of the 1996 Act . Once competitors have successfully and fully broken into the market, economic forces will take over and drive all carriers to minimize their reliance on any one vendor, particularly when that vendor is their primary competitor.[10] In order to get to this point, however, CLECs must have access to those elements that are "necessary" to the provision of telecommunications services and without which they would be "impaired" in their ability to offer the services that they seek to offer.

Section 251(d)(2) is not, as a handful of ILECs suggest, a codification of the essential facilities doctrine under the antitrust laws. Nothing in the plain language of the statutory provision or the legislative history provides any support for this position. Indeed, the doctrine is

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[7] AT&T Comments at 38. The Commission's original UNE rules were established in the Commission's *Local Competition Order*. *Implementation of the Local Competition Provision in the Telecommunications Act of 1996*, First Report and Order, CC Docket No. 96-98, ¶ 380 (released August 8, 1996) ("*Local Competition Order*").

[8] MCI Comments at 3.

[9] COMPTEL at 12-13; Qwest Comments at 17.

[10] It is unlikely that there will ever be a non-ILEC source of loops for DSL services.

so well-known, and so consistently advanced by the ILECs as the appropriate standard, that had Congress meant to codify it in the Act, nothing would have been easier than using the term "essential facilities." That Congress did not indicates its rejection of that standard.

A clear reading of Section 251(d)(2) demonstrates that the "necessary" and "impair" standards are two distinct standards with different meanings. The "necessary" standard requires a higher threshold in that it applies exclusively to "proprietary elements," which because of their intellectual property characteristics warrant stronger protection from unbundling.[11] The "impair" standard, on the other hand, is a lower standard in that it applies to non-proprietary elements. Therefore, the Commission should reject any that attempt to equate the two standards by claiming that the "impair" standard should be given the same meaning as the "necessary" standard. Rather, the Commission should adopt the approach advocated by state commissions, trade associations and competitors, and interpret the "impair" standard as determining whether a competitor will be disadvantaged in its ability to provide the service that it seeks to offer. As the vast majority of the comments concur, the proper focus of this standard is on whether and how a competitor who is denied access to an ILEC element is disadvantaged, not on whether that competitor is completely precluded from providing service.

Proper impairment analysis under Section 251 depends on whether competitors can access an alternative element on comparable terms and conditions either from a competitively viable wholesale market or by self-provisioning the element. This determination is thus dependent on whether the alternative element is interchangeable in terms of such characteristics as availability, cost, provisioning, and quality. Moreover, to be truly comparable, the alternative element must be available on a nationwide basis. In other words, in identifying those elements

[11] 47 U.S.C. § 251(d)(2)(A).

that should be unbundled, the state commissions and new entrants are correct that the Commission should adopt a national minimum list of UNEs.

At a minimum, this list should include the Network Interface Device ("NID"), local loops—explicitly defined to include xDSL capable loops, DLC solutions, and line sharing—interoffice transport facilities, operations support systems ("OSS"), and in a few select situations digital subscriber line access multiplexers ("DSLAMs"). None of these elements is proprietary and an ILEC's refusal to make any of these features available would "impair" a competitor's ability to compete. Finally, the Commission should explicitly implement the Supreme Court's ruling in Iowa Utilities,[12] and order the ILECs to combine the elements that they must unbundle.

DISCUSSION

I. SECTION 251(d)(2) IS NOT A CODIFICATION OF THE ESSENTIAL FACILITIES DOCTRINE

In an effort to raise the threshold for which elements satisfy the "necessary" and "impair" standards, several ILECs mistakenly argue that Section 251(d)(2) requires an "essential facilities" analysis under the antitrust laws.[13] For example, GTE asserts that Section 251 should be interpreted in light of the essential facilities doctrine, which it claims is the only "relevant line of authority analogous to Section 251(d)(2) under which an incumbent firm can be compelled to share its facilities with competitors."[14] The essential facilities doctrine is one specific case of an exception to the general antitrust rule that a firm need not make its facilities available to competitors.[15] Contrary to the ILECs' assertions, this doctrine is not codified in Section

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[12] *AT&T Corp. v. Iowa Utils. Bd.*, 119 S. Ct. 721 (1999).

[13] GTE Comments at 15; Ameritech Comments at 29-31; Bell Atlantic Comments at Attachment 1 ¶ 7(g).

[14] GTE Comments at 15.

[15] "In the absence of any purpose to create or maintain a monopoly, the [Sherman] Act does not restrict the long-recognized right of trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to the parties with whom he will deal." ABA Section of Antitrust Law, Antitrust Law Developments 271 (4th ed. 1997) (citing *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919)). The four elements to an essential facilities claim are: (i) a monopolist with whom the plaintiff competes controls an essential

(Footnote Continued)

251(d)(2) and should not control the Commission's interpretation of the "necessary" and "impair" standards.

As an initial matter, if Congress had intended to codify the essential facilities doctrine, it would have done so explicitly by using the term "essential facility," which Section 251(d)(2) neither incorporates nor references.[16] This is a well-known and established principle that Congress could easily have incorporated into the statute. Indeed, because the essential facilities doctrine is part of the federal antitrust laws, if Section 251(d)(2) were to be guided by this doctrine, Congress would have *mandated* that the Commission apply the "necessary" and "impair" standards in identifying UNEs. Instead, Section 252(d)(2) merely directs the Commission to "consider" whether an element meets the "necessary" and "impair" standards.

Moreover, because the antitrust laws are applicable independently of the 1996 Act's requirements, if the incumbent LECs' unbundling obligations were merely co-extensive with the essential facilities doctrine, then Congress would not have enacted Section 251(d)(2). By enacting this provision, Congress established a different and lower standard for the ILECs' unbundling obligations than that imposed by the essential facilities doctrine. Instead of resting on the case-by-case application of the essential facilities doctrine in the lengthy process of repetitive judicial litigation, Congress chose instead to draft a new statutory criterion, in order to jumpstart local competition. As NorthPoint explained, through Section 251(d)(2) Congress deliberately determined "not to rely on the uncertain application of the essential facilities doctrine" and chose a different standard for the identification of unbundled network elements. [17]

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facility; (ii) the plaintiff cannot practically or reasonably duplicate that facility; (iii) the monopolist denied the plaintiff use of the facility; and (iv) the monopolist feasibly could have provided the plaintiff access to the facility. *See MCI Communications Corp. v. AT&T*, 708 F.2d 1081, 1132-33 (7th Cir. 1983).

[16] AT&T Comments at 48; MCI Comments at 30; ALTS Comments at 32-33.

[17] NorthPoint Comments at 11.

Finally, and contrary to GTE's and Ameritech's statements,[18] there is no legislative history supporting the contention that the essential facilities doctrine applies to Section 251(d)(2). Neither ILEC is able to cite to any conference reports, committee reports or any other legitimate legislative history for their position. Rather, Ameritech cites only to a brief phrase from one witness' hearing testimony that generally references the ILECs' control over essential bottleneck facilities and the need to make those facilities available.[19] The witness was not a legislator and her comments do not rise to the level of legislative history. Thus, the essential facilities doctrine should not control the Commission's interpretation or application of the necessary and impair standards in identifying which network elements ILECs must provide to CLECs on an unbundled basis.

II. THE COMMISSION SHOULD ADOPT "NECESSARY" AND "IMPAIR" STANDARDS THAT RECOGNIZE THE REQUISITE NATURE AND CURRENT AVAILABILITY, OR LACK THEREOF, OF A "COMPARABLE" ELEMENT IN A COMPETITIVELY VIABLE NATIONAL WHOLESALE MARKET

As virtually all of the comments recognize, before the Commission can identify which network elements ILECs should be required to provide on an unbundled basis, it must establish a clear definition of the necessary and impair standards under Section 251(d)(2). Similarly, there is wide agreement that the "necessary" standard in Section 251(d)(2)(A) applies only to proprietary elements,[20] which is widely understood to mean information, software or technology

[18] GTE Comments at 15; Ameritech Comments at 31.

[19] Ameritech Comments at 31.

[20] ALTS Comments at 14; Illinois Commission Comments at 4-7; Texas Commission Comments at 8; CPI Comments at 8; COMPTEL Comments at 17; Qwest Comments at 37; SBC Comments at 11-12; Ameritech Comments at 40.

that is protected by patents, copyrights, or trade secrecy laws.[21] By this definition, any functionality that is subject to industry standards is not "proprietary."[22]

A. The "Necessary" and "Impair" Standards are Distinct Standards Intended to Address Different Criteria for the Unbundling of Network Elements

Because the "necessary" standard only applies to proprietary elements, it should rarely be used,[23] but when it is used the Commission should apply a heightened standard that recognizes the requisite nature of providing even an ILEC's proprietary element on an unbundled basis. In other words, the Commission should find that an element is "necessary" when a carrier, as a practical matter, would be unable provide the service that it intends to offer without access to the element.[24]

It is important that the Commission recognize that the proprietary protection only extends to those features or functions of an element that actually involve disclosure of proprietary information. For example, an incumbent LEC might have a customized OSS database, software code which is unique to that ILEC and arguably proprietary. But the proprietary nature of OSS software does not mean that the database information, or access to that information could ever be proprietary. CLECs' access to the OSS databases should not be governed by the "necessary" standard. It is critical that the Commission specifically address this issue, because the ILECs have a natural and strong incentive to characterize all of their network elements as "proprietary" to minimize their unbundling obligations to their competitors, the CLECs. If the Commission

[21] ALTS Comments at 15-16; NorthPoint Comments at 3-4; Sprint Comments at 9; SBC Comments at 11-12; Ameritech Comments at 42; MCI Comments at 21; *see* BellSouth Comments at 18-19.

[22] COMPTEL Comments at 18-19; Rhythms Comments at 4. As NorthPoint demonstrated, since "these standards and other requirements by definition would not be eligible for protection against disclosure, there is no basis for treating the network elements involved as proprietary in nature." NorthPoint Comments at 5.

[23] COMPTEL Comments at 16-17.

[24] NorthPoint Comments at 5; Allegiance Telecom Comments at 6. *See* Illinois Commission Comments at 4; Public Utility Commission of Texas Comments at 6; Qwest Comments at 37; Sprint Comments at 10; COMPTEL

(Footnote Continued)

does not preempt the ILECs from taking this type of protectionist measure now, competitors and incumbents will be litigating the issue of what elements are, or are not, proprietary for the next several years. This type of protracted litigation will only further delay the development of competition.

A plain reading of the statute demands that the Commission apply a distinct and lower standard for what constitutes "impair" under Section 251(d)(2)(B) than that applied to the "necessary" provision in Section 251(d)(2)(A). Nevertheless, a handful of ILECs equate the two standards.[25] For example, Ameritech and GTE ignore the statutory word "impair" and focus on the word "ability," arguing that the Commission should not consider whether denial of access to an element disadvantages a competitor. They contend that the Commission should find that the unavailability of an element "impairs" a CLEC if that carrier is *prevented* from providing the service it seeks to offer.[26]

This approach improperly collapses the "necessary" and "impair" standards into one test, effectively giving the same protection to non-proprietary elements that the Commission should grant only to highly sensitive elements protected by intellectual property rights. This is improper. Either the "impair" standard applies only to proprietary elements and should be granted a heightened threshold, like that applied to the "necessary" standard, or the "impair" standard should apply to all elements and must be interpreted consistent with the plain meaning of the word, which is to "diminish." [27]

Comments at 19-20; US West Comments at 25-26; CPI Comments at 7-8; Level 3 Comments at 5; MCI Comments at 18-19.

[25] Ameritech Comments at 34-37; GTE Comments at 20; SBC Comments at 5 ('impair' is defined as "[to] preclude meaningful opportunities for competitive entry," a substantively similar test to that for 'necessary'); US West Comments at 11 (espousing the same interpretation as SBC).

[26] Ameritech Comments at 34-37; GTE Comments at 20.

[27] A proper reading of Section 251(d)(2) reveals that the term "proprietary elements" applies to both the "necessary" and "impair" standards with the result that both screening standards apply only to proprietary elements

(Footnote Continued)

The Commission should also reject Ameritech's invitation to whether an ILECs' refusal to provide the element will prevent the CLEC from providing service within two years.[28] The statute includes no basis for such a position, and such predictions are at best uncertain and at worst highly prejudicial. The Commission must consider the current effect on a CLEC that is unable to access an ILEC element today. It "is axiomatic that if a CLEC could enter the market in two months if it obtains access to network elements, but would be delayed for two years if it did not, then that CLEC would be 'impaired' in its ability to offer service during those two years if it is denied access to the LEC's elements."[29]

B. A Competitor is Impaired When Denial of Access to an Element Causes More than a *De Minimis* Disadvantage to that Carrier's Ability to Provide the Service that it Seeks to Offer

As several of the comments advocate, the Commission should find that a carrier denied access to an ILEC element is "impaired" when forcing that carrier to use an alternative element will cause the CLEC to incur a disadvantage, beyond a "de minimis" increase in cost, but does not completely deny the CLEC the ability to provide the service that it seeks to offer.[30] This interpretation is consistent with the plain meaning of the statutory provision and appropriately recognizes how an ILEC's refusal to make a UNE available directly affects the viability of local competition.[31]

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while no standards are applicable to non-proprietary standards. Rhythms Comments at 10. Rhythms recognizes that the Commission has adopted a different interpretation of the statute. The definition of the "impair" standard, however, remains the same regardless of whether it applies to "proprietary element" as stated in the Act or to all elements.

[28] Ameritech Comments at 36.

[29] AT&T Comments at 31. *Accord e.g.* MCI Comments at 18; Sprint Comments at 10-11.

[30] Rhythms Comments at 7; Illinois Commission Comments at 4-7; NorthPoint Comments at 6; MCI Comments at 16-18; COMPTEL Comments at 9; AT&T Comments at 27-28.

[31] Because the "impairment" standard includes more than a *de minimis* increase in cost, it comports with the antitrust principle that raising rivals' cost is anticompetitive and exclusionary. For example, as explained more fully below, ILECs have sufficient market power in the transport market that they are able to set their special access prices well above the UNE total element long run incremental cost ("TELRIC") that would exist in a fully

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In order to determine whether lack of a UNE diminishes a CLEC's ability to provide service—or grants an ILEC a significant competitive advantage—the Commission must determine whether an alternative element is available in the wholesale market or can be self-provisioned under comparable terms and conditions. It is important to note that the mere "availability" of an element is not sufficient, as some ILECs suggest,[32] to avoid "impairment." Rather the alternative element must be "comparable," or "interchangeable," with the ILEC's UNE.[33] Interchangeability means that there is no material difference between the ILEC UNE and the alternative element in terms of "functionality, quality of service, cost, scope of availability, timeliness of provisioning, and other factors consistent with the public interest."[34] As AT&T summarized, a competitor's ability to provide service is diminished if by being denied access to the ILEC element, "it is unable to provide service as broadly, as effectively, or as promptly as it would if access were granted."[35]

Moreover, when examining the existence of a viable alternative element, the Commission must consider whether the alternative element will allow the CLEC to provide the service that it *seeks to offer*.[36] As NorthPoint appropriately demonstrates, the only relevant service is that which the CLEC wishes to provide. "For a DSL carrier seeking loops, for example, a competitive wholesale market for copper loops is a substitute for the incumbent LEC loop; wireless local loops or other broadband end-user alternatives are not substitutes."[37] Thus, when

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competitive transport market. In this way, incumbents can use their market power to raise their rivals' cost to gain an anticompetitive advantage.

[32] GTE Comments at 14-20; SBC Comments at 9-10; US West Comments at 12-15..

[33] COMPTEL Comments at 14-16; MCI Comments at 4; Qwest Comments at 16; ALTS Comments at 26-30.

[34] ALTS Comments at 26-27. *See also* AT&T Comments at 27-29; MCI Comments at 16-17; Network Access Solutions Comments at 10-13; Oregon PUC Comments at 2;Ohio Commission Comments at 5.

[35] AT&T Comments at 29.

[36] 47 U.S.C. § 252(d)(2)(B).

[37] NorthPoint Comments at 9.

determining whether alternative UNEs are available through either a competitive wholesale market or self-provisioning, the Commission must determine not only whether that alternative is being provisioned under comparable terms and conditions, but also whether it is a suitable alternative for the particular service at issue.

The record supports Rhythm's view that a fully competitive wholesale market requires the presence of competing providers that have the capability to furnish the element requested by the competitive LEC in the quantities and time frames needed.[38] A few ILECs take the extreme position that the mere presence of *any* alternative facilities is sufficient to demonstrate the existence of a wholesale market.[39] However, a competitive wholesale market is not created by the presence of one other provider. To the contrary, a fully competitive market for elements requires that there be a "sufficient number of wholesale vendors."[40] The ILECs' argument fails to recognize that even if competitors can obtain an element from an independent source, if that element is not "equivalent in functionality, ease of operation, speed to market, quality, or price to the ILEC network element, then that element is not interchangeable with the ILEC's network element," and it is not a sufficient alternative to avoid impairment.[41]

C. The Commission Should Establish a Minimum Set of Unbundled Network Elements to Fully Effectuate the Provisions of the 1996 Act

The Commission must also consider the geographic scope of the market. The record supports NPRM's tentative conclusion that explicit national standards for identifying which elements should be unbundled is essential to ensuring that both the Commission and the states

[38] NorthPoint Comments at 8.
[39] GTE Comments at 33; Bell Atlantic Comments at 15-16; US West Comments at 12.
[40] Qwest Comments at 16.
[41] Qwest Comments at 22-23.

are able to fully implement the procompetitive goals of the 1996 Act.[42] As MCI noted, "only national unbundled network element rules can provide uniformity and predictability in the marketplace that new entrants need to formulate and execute national business plans to offer local telephone service."[43] Contrary to SBC's and Ameritech's suggestions, a minimum list of UNEs available on a national basis is not inconsistent with Section 251(d)(2) or the Supreme Court's decision.[44] As several state commissions noted, the 1996 Act directs the FCC to make the initial determination on what network elements should be made available.[45] Moreover, the issue of a national list of elements was not even subject to appeal and the Court never addressed this issue in *Iowa Utilities*.[46] Thus, a national list of network elements is entirely consistent with the 1996 Act as interpreted by the Supreme Court's decision.

The state commissions are correct that a national list of elements will not only facilitate competitive entry, but also streamline the state arbitration process.[47] If the Commission were to examine the existence of wholesale markets at the granular level of wire centers, as Ameritech and GTE propose,[48] it would cause a fire storm of litigation at the state level. Incumbents and CLECs would spend significant resources and time litigating what is a UNE. Such a result would cause a further drain on both commission and carrier resources away from the build out of facilities and the provision of competitive innovative services. This, is turn would cause even

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[42] ALTs Comments at 3, 8; AT&T Comments at 40; California PUC Comments at 3; COMPTEL Comments at 23-26; Illinois Commission Comments at 2; NorthPoint Comments at 1-3; Texas Commission Comments at 1; Qwest Comments at 32; Iowa Board Comments at 1-2.

[43] MCI Comments at 4-5. *See* Iowa Board Comments at 2; Ohio Commission Comments at 4.

[44] SBC Comments at 15; Ameritech Comments at 53.

[45] Texas Commission Comments at 2 *citing* 47 U.S.C. § 252(d)(2); Iowa Board Comments at 1-2; Illinois Commission Comments at 2; Ohio Commission Comments at 2.

[46] Texas Commission Comments at 2-3; Illinois Commission Comments at 2; Ohio Commission Comments at 2; COMPTEL Comments at 24.

[47] California Commission Comments at 4; Illinois Commission Comments at 2.

[48] Ameritech Comments at 55; GTE Comments at 57-63.

further delay in deployment.[49] Moreover, as AT&T predicts, "the extent of such litigation would dwarf even the experiences of the last three years, because this time it would be endless."[50] Therefore, as a matter of both law and policy, the Commission should affirm its earlier decision and adopt a national list of UNEs.

Once the Commission establishes a minimum list of elements to be provided on an unbundled basis, it should periodically review this list to ensure both that the listed elements continue to meet the appropriate standards and that any new elements are added to the list. To this end, ALTS proposes that the Commission adopt a biennial review process and that all UNEs on the minimum list should remain available through the conclusion of the first biennial review.[51] Although Rhythms concurs that periodic review is appropriate,[52] we are concerned that a two-year interval is overly ambitious. Even the district court's "triennial reviews" of the AT&T consent decree proved impossible to complete on time. Regardless of the interval chosen, however, the Commission should place the burden of proving that a particular element should be removed from the national list firmly on the ILECs.[53] Similarly, it is reasonable for CLECs to assume the burden of proof that new elements should be added to the minimum list.[54] While

[49] The Commission's Advances Services proceeding provides a good example of how litigation can delay deployment. The Commission first initiated its Advanced Services proceeding in 1998. The Order did not become effective until June of 1999. To date, the ILECs have not fully complied with this Order.

[50] AT&T Comments at 41-42.

[51] ALTS Comments at 6-7.

[52] Rhythms Comments at 28.

[53] ALTS Comments at 7; Qwest Comments at 2, Illinois Commission Comments at 7-8; Texas Commission Comments at 4.

[54] ALTS Comments at 7; New York Department of Public Service Comments at 2, 5; US West Comments at 32; BellSouth Comments at 29.

both the FCC and state commissions should be able to add elements to the list,[55] the Commission should have exclusive decision-making authority to remove elements.[56]

III. AT A MINIMUM THE COMMISSION SHOULD ORDER ILECS TO PROVIDE TO CARRIERS ON AN UNBUNDLED BASIS, LOOPS, INCLUDING THE FEATURES AND FUNCTIONALITIES OF xDSL CAPABLE LOOPS, NIDs, TRANSPORT FACILITIES, AND OSS.

There are several elements from the Commission's original list of seven UNEs that continue to satisfy Section 252(d)(2) unbundling requirements. Clearly, the Commission should require incumbents to unbundle the NID and loops. In addressing loops, the Commission should specify that the ILECs must unbundle xDSL capable loops, including any necessary conditioning, for the provisioning of advanced services. In addition, given DSL services' technological requirement for copper loops, the unbundling obligations should include any solutions available for working around digital line carrier in the outside plant. Furthermore, the loop definition should incorporate the ability of a carrier to provide data services over the same loop that is used to provision voice services. Finally, the Commission should specify that a competitor has the right to information regarding the availability of loops, including the physical make-up of those loops, as well as the right to designate a particular loop that it wants as the its UNE loop.

The Commission should also continue to find that incumbents must offer transport as UNEs. With regard to transport, there are no alternatives to the ILECs' transport that are comparable in terms of ubiquitous access, provisioning or cost. Contrary to the ILECs'

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[55] ALTs Comments at 5; Illinois Comments at 3-4; Ohio PUC Comments at 25; Qwest Comments at 42; Washington Commission Comments at 3.

[56] ALTS Comments at 5-6; COMPTEL Comments at 53-54; Illinois Commission Comments at 3-4; Joint Comments of Choice One Communications, Network Plus, Inc., GST Telecom Inc., CTSI, Inc., and Hyperion Telecommunications, Inc. at 3; MCI Comments at 13-14; MGC Communications Comments at 7-8.

arguments, sporadic instances of competitor use of alternative transport is not indicative of a viable wholesale market for transport.

There is no question that CLEC access to the ILECs' OSS is critical to the provision of competitive services. The Commission should explicitly require ILECs to provide OSS such that CLECs have the equivalent access to the same information that is available to the incumbents. Specifically, the Commission's definition of OSS should ensure that CLECs have access to specific information on the physical make-up of the loop, which is vital to the provisioning of certain advanced services.

Finally, under a proper application of the "impair" standard, the Commission should not, except in a few select instances, include Digital Subscriber Line Access Multiplexers ("DSLAMs") on its UNE list. ILECs should only be required to unbundle DSLAMs where a competitive advanced service provider is not able to access a potential customer because either (i) the CLEC is denied collocation space in the central office, CEV, RT or other premises, or (ii) the loop to that customer is provisioned over DLC.

A. The NID is A Gateway to Customers' Inside Wiring and Should be an Unbundled Network Element Required by the Commission

A substantial number of commenters, including competitive LECs and state commissions, recognize that the inability to access the NID would materially diminish a competitor's ability to offer services, and thus, competitors should have access to the NID as a separate unbundled network element or as a part of unbundled access to loops.[57] In contrast, SBC and GTE argue that a NID is an inexpensive piece of equipment, sold on the open market,

[57] Allegience Comments at 20; ALTs Comments at 48; AT&T Comments at 83-84; Competitive Policy Institute at 17; COMPTEL Comments at 35-37; E.spire Comments at 20; MGC Comments at 9; and Rhythms Comments at 18.

and therefore does not satisfy the "impair" standard.[58] What the these incumbents fail to recognize, however, is that competitors need to access the ILEC NID — the NID that serves as the interface between the loop and a subscriber's inside wiring — in order to provide their own services. If competitors are denied access to the NID they will be unable to connect to the inside wiring, making the provision of any competing service impossible. This impact, which far exceeds the appropriate test for impairment, demonstrates that the NID must be provided to CLECs on an unbundled basis under Section 251(d)(2)(B).

B. The Commission Should Order ILECs to Unbundle the Features and Functionalities of Local Loops Based on the Different Services Carriers Provide, Including Advanced Services

1. The Record Evidence Clearly Demonstrates that the Commission Must Include Loops on the Minimum List of UNEs to be Unbundled

There is no legitimate dispute that ILECs must be required to provide competitors unbundled access to local loops, which are the "quintessential bottleneck network elements."[59] The vast majority of commenters recognize that loops, which is not a proprietary facility, clearly satisfies the Section 251(d)(2)(B) impair standard.[60] This is true because there is no competitive wholesale market in existence for loop facilities today. Moreover, because of the high cost of "duplicating the existing 'last mile,'" it is "unlikely that a wholesale market for non-ILEC loop alternatives will develop in the foreseeable future."[61]

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[58] SBC at 33; GTE at 56.

[59] AT&T Comments at 59. In its *Local Competition Order*, the Commission required the unbundling of loops, which were defined as "a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and an end user customer premises." *Local Competition Order* ¶ 388.

[60] ALTS Comments at 36; AT&T Comments at 59-61; Joint Comments of Choice One Communications, Network Plus, Inc., GST Telecom Inc., CTSI, Inc., and Hyperion Telecommunications, Inc. at 15-16; Level 3 Comments at 15; MCI Comments at 43-44; MGC Comments at 2; NorthPoint Comments at 13-14; Oregon PUC Comments at 2; Qwest Comments at 56; US West Comments at 38.

[61] ALTS Comments at 37.

Notwithstanding the strong record evidence to the contrary, a handful of ILECs have taken the extreme position that ILECs should not be required to unbundle certain local loops.[62] GTE, for example, attempts to create the illusion of a wholesale market on the basis that a few competitors have access to fixed wireless and are, in some cases, building fiber directly to the customer's location.[63] What GTE fails to recognize, however, is that fixed wireless options "are not technically suitable for wireline loops, and are not available at all on a wholesale basis—let alone on a basis that would provide an alternative interchangeable with an ILEC unbundled loop."[64] Indeed, even SBC acknowledges that wireless is not yet a viable alternative to the local loop.[65]

Likewise, self-provisioning the local loop plan is not an economically viable alternative to the ILEC's loop.[66] Self-provisioning local loops would require CLECs to make a substantial initial sunk investment in loop facilities "before they had a customer base large enough to justify such an expenditure."[67] In addition, because of the build-out schedules and the need to secure municipality and ILEC authority for use of rights-of-way, self-provisioning the local loop plant would cause substantial delays in market entry. This type of obstacle "would critically undermine the prospects for widespread competitive entry."[68] For these reasons, eliminating loops from the national minimum list of UNEs would "foreclose UNEs as a method of entry and effectively would upend the pro-competitive plan adopted by Congress in the 1996 Act."[69]

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[62] GTE Comments at 10, 63-70. GTE argues that loops serving certain business customers, multi-dwelling units or loops serving new residential or commercial developments should not be subject to unbundling obligations. *Id*. Ameritech Comments at 100-106; Bell Atlantic Comments at 36-39; BellSouth Comments at 70-76.

[63] GTE Comments at 64.

[64] ALTS Comments at 37.

[65] SBC Comments at 28.

[66] AT&T Comments at 61-66.

[67] AT&T Comments at 63.

[68] AT&T Comments at 66.

[69] ALTS Comments at 37 (citation omitted).

GTE's claim that the availability of local loops through interconnection agreements or special access tariffs justifies eliminating loops from the ILEC unbundling obligations is ludicrous.[70] ILEC interconnection agreements are not an *alternative* to unbundled loops, but only a means of enforcing Section 251. In any event, as the last three years have amply demonstrated, if the Commission does not require ILECs to offer loops on an unbundled basis, ILECs will not agree to offer loops in their interconnection agreements.[71]

2. The ILEC's Unbundling Requirements Should Include the Provisioning of xDSL Capable Loops

As several of the commenters have noted, DSL providers require access not only to the transmission facility between the ILEC central office and the end user, but access to the ILECs' xDSL capable loops.[72] An xDSL capable loop is merely a contiguous copper facility, unfettered by any intervening equipment such as load coils, repeaters, or an excessive number of bridge taps. Since DSL services are technologically dependent on these *clean* copper loops, DSL providers who are denied access to these loops will not only be impaired, they will be eliminated from the market entirely.

For this reason, the Commission should adopt Rhythms' proposed definition of the loop, which is consistent with several other parties' positions, in that it incorporates those "features and functionalities" of the loop, including "access to, and if necessary conditioning existing plant to provide, contiguous metallic wire links unfettered by load coils, repeaters and excessive

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[70] *See* GTE Comments at 61-63.

[71] Likewise, loops that are purchased out of the ILECs' special access tariffs are neither an alternative, nor comparable to, the unbundled local loops that incumbents must now provide. First, special access loops are ILEC facilities, so they do nothing to eliminate reliance on the IELC network. Second, tariffed loops are only available at prices well above incremental cost and are subject to the terms and conditions unilaterally imposed by the ILEC. Unbundled local loops, on the other hand, must be priced based on the Commission's mandated pricing methodology of Total Element Long Run Incremental Cost. Thus, forcing competitors to rely on the ILECs' special access tariffs to acquire loops would place these competitors at a substantial competitive disadvantage.

bridge taps."[73] Moreover, when purchasing the loop, the CLEC should be granted "exclusive use" of the features and/or functionalities that it selects.

Rhythms is not aware of any ILEC claiming that a wholesale market exists for xDSL capable loops. Indeed, no party could make such a claim, because there are no comparable alternatives to the ILECs' copper plant.[74] No other facility, including cable modems, fixed wireless or self-provisioned fiber to the end user, is able to provide a technologically sufficient alternative to xDSL capable loops.[75] Therefore, even if these alternatives were sufficiently available through a competitive wholesale market, which the record evidence demonstrates they are not, these options do not support all the services that competitors may seek to provide.[76] Because of the technological limitations of these features, they do not represent a viable alternative for xDSL carriers. Moreover, as NorthPoint correctly demonstrates, "no alternative providers are likely to emerge, since the incumbent LECs' existing copper loop infrastructure would be prohibitively expensive to replicate."[77] Indeed, if xDSL providers are denied access to clean copper loops, they would not only be impaired, they would be completely unable to provide their services.[78]

As part of their unbundling obligations, the Commission should specify that ILECs must "condition" the loop on the same terms and conditions that they do for their own services. That is, incumbents must, for example, remove load coils and bridge taps, so that a competitor may

[72] ALTS Comments at 41; AT&T Comments at 72-73; COMPTEL Comments at 31-35; Network Access Solutions Comments at 14-22; Qwest Comments at 61; NorthPoint Comments at 14; COVAD Comments at 33-34.
[73] Rhythms Comments at 14; ALTS Comments at 41; COMPTEL Comments at 33.
[74] NorthPoint Comments at 14.
[75] Rhythms Comments at 14.
[76] AT&T Comments at 70.
[77] NorthPoint Comments at 14.
[78] AT&T Comments at 76.

"provide the service that is seeks to offer."[79] ALTS is correct that "requiring ILECs to condition loops by removing bridge taps and loading coils at a competitor's request is consistent with the unbundling standards set forth in Section 251 and with the Commission's obligation to encourage the deployment of advanced services."[80] Moreover, in order to ensure that the provisioning of a conditioned loop does not "impair" a CLEC's ability to provide advanced services, the ILECs should be explicitly prohibited from imposing excessive "conditioning" charges for this service. Indeed, CLECs should not pay conditioning charges at all. For ADSL-capable loops (which must be loops under 18,000 feet), CLECs should not pay any conditioning charges. Bellcore resistance design standards indicate that loops under 18,000 feet should not contain such impediments, and thus competitors should not pay charges to correct the ILEC's network to comply with this standard. Moreover, in a forward-looking cost model already presumes that loops will be data ready. Accordingly, the price for an ADSL loop should be no different that the 2-wire loop rate.

3. The Commission's Loop Definition Should Include a DLC Solutions

The incumbent LECs either failed to address, or blatantly mischaracterize, the importance of a loop definition that addresses the problems CLECs face when they try to order xDSL-capable loops for customers served by digital loop carrier ("DLC") facilities. As described by numerous commenters, access to clean copper loops capable of delivering most xDSL services necessitates a *contiguous* copper path, not one interrupted by fiber facilities such as DLC.[81]

Several solutions to the DLC problem have been presented both to the ILECs and the Commission, including: (1) transfer of CLEC services onto existing copper plant that is either

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[79] 47 U.S.C. § 252(d)(2)(B).

[80] ALTS Comments at 41. *See* AT&T Comments at 75-76 *citing First Report and Order* ¶ 260.

[81] *See* Rhythms Comments at 15-16; Covad Comments at 37-41; AT&T Comments at 78-82; MCI Comments at 43-51; BellSouth Comments at 35, n.32.

not currently active, or is currently serving a non-copper-dependant ILEC service; (2) collocation of DSLAMs at DLC remote terminals ("RTs") and controlled environment vaults ("CEVs") to allow CLEC access to the copper termination point of the loop; (3) requiring ILECs to deploy remote terminals and DSLAMs that accept different types of CLEC line cards; (4) allow the CLECs to construct and occupy a second, interconnected, remote terminal and (5) where no other means of reaching a customer exists, requiring unbundled access to any ILEC DSLAM equipment located in or near the remote terminal.[82] Ultimately, without a UNE definition that considers and addresses the ability of CLECs to provision xDSL services past DLC, the prospect of competitive entry and survival in the xDSL-based advanced services market is dim. Therefore, if CLECs are denied access to these solutions, they will be significantly impaired in their ability to provide advanced services.

USTA, Ameritech, US West, Bell Atlantic and BellSouth simply failed even to raise the impact of DLC facilities on CLEC access to unbundled loops.[83] This is remarkable considering the lengthy and repeated negotiations CLECs such as Rhythms have had, and are continuing to have, with all of these companies regarding the DLC issue and the solutions listed above. As long as there are CLECs interested in providing xDSL-based services, this is an issue that will not go away until the Commission explicitly resolves it. The attention paid to this issue in the ILECs' comments matches precisely their complete lack of any demonstrable effort to solve this problem at an implementation level for their CLEC customers.

SBC and GTE, the only two ILECs that even bothered to address the DLC-related issues, did little if any better at addressing the problem and its potential resolutions. SBC, for instance,

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[82] Rhythms Comments at 15-16; NorthPoint Comments at 16-18; Covad Comments at 40-41; ALTS Comments at 46; NAS Comments at 32-36.

[83] USTA Comments at 35-36; Ameritech Comments at 100-106; US West Comments at 36-40; Bell Atlantic Comments at 36-46; BellSouth Comments at 62-75. Although these Commenters do address (and

(Footnote Continued)

appears to be confused about its own position. SBC first states that, "[r]emote access at points such as feeder distribution interfaces (FDIs), remote terminals, and controlled environment vaults (CEVs) is not necessary for the CLEC to provide service, nor will such lack of access impair the CLEC's ability to provide service."[84] This statement, apparently directed at the RT collocation option for dealing with DLC, is clearly untrue on its face.[85] Simply put, on a regular basis, ILECs are either unable, or claims to be unable, to provide access to a continuos cooper loop from a customer premises to the ILEC central office because of DLC on the loop. At those times, the CLEC *must* gain access to the ILEC end of the copper portion of the loop, regardless of where that termination point is, or what service the CLEC proposes to offer over it. In those instances, the only means for accessing a copper loop may involve requiring the ILEC to provide access to its RTs and CEVs or one of the other solutions described above.

Confusingly, SBC appears to recognize its duty to provide such collocation alternatives when it states, in the very next footnote, that "CLECs, moreover, have the right to collocate in adjacent CEVs or similar structures, when space is legitimately exhausted in a particular LEC premises."[86] The very solution described in SBC footnote 50 is one of several that should routinely be made available by ILECs to address the DLC problem. Namely, ILECs must be required to allow the collocation of CLEC xDSL equipment wherever on a LEC's *premises* collocation is necessary to gain access to the termination point of the plain copper loops, not just at or near the ILEC's central office.

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generally reject) the idea of unbundling advanced services technology, they do so ignoring the possibility of DSLAM unbundling as a regulatory solution to the DLC problem.

[84] SBC Comments at 30.

[85] This is particularly ironic given that several ILECs have recently announced imminent "solutions" that would allow them to provide DSL services to customers served by DLC. Bell Atlantic, ISP/SP Care Package for ADSL Service, Section 16 at 17. US West, US West Unveils Technology Enhancements That Nearly Double Number of Customers Who Can Receive Its Lightening Fast-ADSL Internet Service. <http://www.uswes.com/cgi-bin/excite/AT-comsearch.cgi?doc+d5597&>

[86] *Id.* at n. 50.

Although SBC admits that it is required to allow various collocation alternatives that are not necessarily limited to central offices, it proceeds to argue that "[s]ub-loop unbundling raises a host of technical, safety, security and maintenance issues" and should not be a part of the Commission's loop definition.[87] SBC concerns about sub-loop unbundling are spurious because the xDSL CLECs would prefer to lease a complete or "full" loop facility from the customer premises all the way back to the central office and are only prevented from doing so by the ILEC. Indeed, under the DLC solutions described above, while the DSL electronics would be placed at the midpoint in the loop, the DSL signal from that loop would be handed off to the CLEC collocation in the central office. Therefore, the real issue in solving the DLC is most often one of collocation of DSL equipment rather than of subloop unbundling. Likewise, GTE attacks the "sub-loop unbundling" issue without addressing any other solution to the DLC issue.[88] These arguments fail to recognize that in most cases, Rhythms will use ILEC facilities to carry that traffic back to its collocated equipment in the central office. Thus, Rhythms will be using ILEC facilities from the end user, bring that traffic through a DSLAM housed in an RT or CEV, and then continue to use the ILEC's facilities to take the traffic back to the central office.

Not surprisingly, all of the ILECs chose not to address the most basic and straight-forward method for them to meet their statutory obligation and provision xDSL-capable loops where requested. Where the loop initially requested by the CLEC is incompatible with xDSL (because it is "loaded" or runs behind DLC), the ILEC must make available any existing copper facility, whether it is in use or not, that is not currently carrying a service that is copper-sensitive. That is, the ILEC must simply switch the ILECs POTS service onto the loaded or DLC-encumbered loop and simultaneously switch the CLEC xDSL-based service onto the copper

[87] *Id.* at 30.
[88] GTE Comments at 87-89.

facility. This can and should occur in a matter of minutes, not days, as would be the case were the incumbent needed the switch to occur for its own purposes. This "line and station" transfer is not only inexpensive and the most efficient use of the network, it is the day-to-day routine of the ILECs, and should be required by the Commission as part of any UNE definition of loops.

Thus, as if hoping that by ignoring the issue it might go away, the ILECs have largely left unaddressed the critical issue of how to define an unbundled local loop in such a way as to ensure that competitor xDSL service can be provisioned over it, even when the requested loop is served by DLC facilities. As Covad points out in its comments, the ILECs also face, and are addressing this same problem for themselves.[89]

Because the incidence of DLC in the incumbent's networks appears to be growing rather than shrinking, the Commission is left with no choice but to address this issue head-on. The simplest and most basic venue for resolving the advanced services loop requirements is through this proceeding. In order to avoid months or even years of delay to competition in advanced services, the Commission must craft its definition of the loop UNE to include some or all of the menu of DLC solutions mentioned above as well as those described by the CLECs in their comments. Without relief, the incumbents will have found a near-perfect barrier to entry that they are free to expand at will.

4. The Commission's Loop Definition Should Require Line Sharing

Several CLECs, including Rhythms, argued in their initial comments that the Commission should take this opportunity to include in the loop UNE definition a requirement that ILECs allow requesting CLECs to provide data services over the same loop that the ILEC provides its own voice services (known as "line sharing" or "spectrum unbundling").[90]

[89] Covad Comments at 39.
[90] Rhythms Comments at 16-17; NorthPoint Comments at 14-15; NAS Comments at 28-31.

In this case only one ILEC, BellSouth, bothered to address this issue in its comments.[91] BellSouth initially attempts to dismiss the issue of line sharing by claiming that "there are alternative facilities" to the local loop "that are being used to compete in the provision of advanced services."[92] This argument must be rejected for the same reason as for loops generally: all other alternatives for provisioning advanced services across the "last mile" are nascent and are not currently effective market substitutes for access to a clean copper loop.

BellSouth next argues that "[u]nbundling incumbent loop spectrum can have no consumer benefits because the advanced services market is already competitive."[93] This claim ignores the fact that although advanced services *may* be new enough to currently be free of the direct market power of any one provider,[94] the two most likely media for the provisioning of advanced services, the phone line and the cable wire, are currently controlled by longstanding incumbent monopolists. As a result, the services dependent on these media are subject to the market power of the media suppliers. Further, the services available over the two technologies are *not* necessarily economic substitutes.[95] Thus, even if a competitive market exists today, the future of competition depends upon *both* internal competition within technologies, and external or intermodal competition between technologies.

Moreover, BellSouth's comments completely ignore the fact that line sharing would allow CLECs and CLEC/ILEC combinations to offer their services for lower prices by eliminating the significant recurring costs associated with second and third phone lines. This

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[91] BellSouth Comments at 45-47.

[92] *Id.* at 46.

[93] *Id.*

[94] There are certainly many consumers who currently can *only* be served advanced services by their incumbent LEC because of the incumbent LEC's success to date in delaying its CLEC competitors.

[95] For example, xDSL services provide customers with a dedicated line that is just for their use, while cable modem service requires customers to "share" bandwidth. Thus, the bandwidth available to a cable modem customer can vary significantly based upon how many other customers are sharing the bandwidth at a particular time. As another example, cable line and telephone infrastructure do not allow for the same deployment footprint, as in some areas phone lines are available and cable lines are not.

unnecessary cost is the single most important economic barrier to wide deployment of xDSL services to residential consumers. Currently only the ILECs are able to achieve that savings, thus giving them a discriminatory price advantage based on their unwillingness to treat their competitors as they treat themselves.

More importantly, however, by refusing to allow line sharing, the ILECs are denying consumers what they want through the development of competition; namely technologically sophisticated services provided efficiently and economically. BellSouth refuses to allow a consumer to receive competitively provided data services over their existing BellSouth voice line. In other words, the incumbent is forcing the consumer to either purchase a second line to their premises to receive competitive data services, or continue to use a single line, and switch their voice service to the competitor providing their data services. Moreover, BellSouth's line sharing prohibition is unique in its application to advanced services. When competition in the long distance market developed, consumers were not forced to purchase a second line for their long distance service and use their existing line for their local service. Likewise, the Commission should not allow BellSouth or any other incumbent to restrict the consumers' choice in this way for advanced services.

Finally, BellSouth obscurely claims that line sharing would "create a significant disincentive to incumbent LEC and CLEC investment in advanced service" and that the "operational and regulatory costs to administer a spectrum unbundling scheme would be extremely high."[96] These are, however, the same tired arguments that the incumbents have been making to the Commission for over a year regarding advanced services. They are, in reality, nothing more than pat responses by the ILECs to any attempt to introduce competition to a market they perceive as part of their dynasty. Despite their repeated claims that advanced

services would not be built-out without deregulation of the ILECs, in fact dense DSL-based CLEC footprints exist today and continue to grow; these footprints are limited today only because of ILEC-imposed delays and increased costs.

Again, the ILECs appear to believe that by ignoring the issue of line sharing it might go away. Instead, the Commission should address this issue directly by defining an unbundled local loop to include line sharing. A failure to do so will result in the continuation of the existing price discrimination policies and a delay in full deployment of xDSL services to residential consumers.

5. The ILECs' Loop Unbundling Obligation Should Include Carrier Access to Specific Loop Information

In order for carriers to efficiently and effectively use unbundled loops for the provision of competitive advanced services, the Commission should ensure that they have access to specific loop information regarding both the physical make-up of the loops, as well as the availability of those loops. Because DSL services are technologically dependent on clean copper loops of a certain length, carriers must have access to information on the physical characteristics of the loop. Specifically, in order to know which service it is able to offer, DSL providers must have access to data regarding, for example, the length, gauge, whether it is provisioned over DLC, the existence of load coils or repeaters, as well as the presence and location of bridge taps.

[96] *Id.* .at 47.

In addition, new entrants must have access to information on the availability of loops. That is competitors need to know the physical make-up information of: (i) the loops currently in service to a particular end user; (ii) the loops available or assigned to a particular end user, but not yet in service; and (iii) the loops generally available in a particular neighborhood. This information is important because a competitive provider of DSL service should be able to designate and select a specific copper loop in any of these categories of availability.

For example, if a consumer has two lines in service to their premises, one of which is provided on copper and is used as the primary voice line and the other is provided over fiber and is used for data and/or a second voice line, the CLEC should be able to identify, select and order the copper line as the UNE. The ILEC should then be required to make the copper line available to the CLEC by either transferring the primary voice line, including the telephone number, to the fiber facility or providing the CLEC with a copper loop that is not in service, but is available or assigned. This transfer of lines should happen seamlessly, in one fluid step, to avoid any interruption in the consumer's service. In other words, the consumer ordering DSL from a competitor should not be forced to disconnect its copper line, then wait and hope that the incumbent will provide the competitor with that same line for the provision of advanced services. Likewise, the CLEC should not have to order a loop blindly hoping that the ILEC will make available the loop that the consumer had disconnected. Such a result would be unfair to both the consumer and the competitor seeking to provide advanced services. Therefore, the DSL provider should have full and unfettered access to the loop information to identify, select and order a specific loop for its service and any necessary transfer of services should occur as one simultaneous process rather than several unrelated steps.

C. Access to Unbundled Transport is the Only Means By Which Competitors Can Obtain Wide-spread Availability of Transport on Timely, Cost-effective and Reasonable Terms

Interoffice transport consists of transport facilities both between two ILEC facilities or transport between ILEC and CLEC facilities. These transport facilities include high-capacity lines such as DS3s, OC3s, OC12s and OC48s, which are particularly key for advanced service providers like Rhythms.[97] Because transport facilities do not raise any proprietary concerns,[98] the "impair" standard is the benchmark for evaluating whether or not unbundled transport should be made available.

There is strong agreement among a wide variety of commenters that: (i) access to interoffice transport facilities is crucial to competitors' ability to offer services; (ii) there is no widespread availability of transport in urban, suburban or rural areas; and (iii) the ILEC's transport facilities are thus the only real means for competitors to gain access to transport.[99] However, a few ILECs argue that ILECs should not be required to provide unbundled access to these key facilities on the grounds that substitute transport facilities are available, collocation obviates the need for unbundled transport, competitors can obtain transport from special access tariffs and interconnection agreements, and the existence of sporadic self-provisioning.[100] For the reasons discussed below, the Commission should reject these arguments and establish one rule on transport—that it should be unbundled—rather than a fractionalized rule based on a variety of parameters. Establishing disjointed rules would be inefficient, encourage the

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[97] Covad Comments at 50-53; NorthPoint at 19.

[98] *First Report and Order* ¶ 446; ALTs Comments at 50; AT&T Comments at 111.

[99] Allegiance Comments at 18-19; Covad Comments at 43, 45-48; Competitive Policy Institute Comments at 27; Illinois Commerce Commission at 13; Qwest at 73; MGC Comments at 9, 21-24; NorthPoint Comments at 13, 19-20Texas Public Utility Commission Comments at 14; and Vermont Public Service Board Comments at 12.

[100] Ameritech Comments at 86-94; Bell Atlantic Comments at 26-32; BellSouth Comments at 47-62; SBC Comments at 45-46.

incumbents to game the process and delay competitors' deployment significantly as competitors had to defend constantly their right to unbundled transport.

1. There is No Transport Substitute That Rivals Unbundled ILEC Transport in Ubiquitous Access, Timeliness and Cost

ILECs have argued that competitors' services would not be impaired in the absence of unbundled ILEC transport based on the purported availability of comparable transport on the wholesale market.[101] In supporting their claim, the incumbent LECs point to certain urban centers where they claim that competitive LECs and Competitive Access Providers ("CAPs") provide a competing source for transport.[102] In addition, incumbents have also pointed to the ability of electric utilities and cable companies to provide fiber to competitors,[103] as well as the availability of transport equivalents, such wireless radio and microwave technologies.[104]

What the ILECs fail to recognize, however, is that for non-ILEC sources of transport to be a viable alternative for competitors, that transport must be available ubiquitously, in a comparable timeframe and at a comparable cost to that provided by the ILEC as a UNE. Anything less would disadvantage competitors. Specifically, as Qwest demonstrated, there needs to be "a sufficient number of wholesale providers of that network element, across a sufficiently large geographic area to constitute a commercial market, to produce a presumption that there is an effectively competitive wholesale market."[105] None of the proported transport "substitutes" proposed by the incumbents can approximate the ubiquitous availability, timeliness and cost of the ILEC transport.

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[101] BellSouth Comments at 47-50, 53; and Qwest at 28.

[102] For example, SBC notes that in Houston, competitors have deployed 831 known route-miles of fiber, and that within the top 50 MSAs, competitors have deployed "almost 30,000 miles of fiber," which equates to an average of 600 miles per MSA. SBC Comments at 46.

[103] SBC Comments at 48.

[104] SBC Comments at 51; GTE Comments at 62.

a. Alternative Transport is Not Available Ubiquitously

Incumbent LECs attempt to demonstrate that alternative transport is available by singling out a handful of competitors deploying fiber in discrete urban areas.[106] The reality is different. In contrast to the millions of miles of ubiquitous fiber routes installed by ILECs, a handful of firms have deployed a few hundred miles of fiber in a small number of select urban markets. For example, in the December 1998 Local Competition Report released by the FCC, incumbent LECs collectively enjoyed 14 million miles of fiber, while competitor deployed fiber only totaled 1.8 million miles.[107] The facts show that CLECs do not have access to comparable ILEC transport in terms of ubiquity because alternative transport is only available in discrete markets.

Unless competitors have access to ubiquitous forms of non-ILEC transport, they will be impaired if the are denied access to ILEC transport.

> It is hard to overstate the importance of this ubiquity and the competitive advantage that these ubiquitous interoffice transport networks give the incumbent LEC. The ability to connect *any* end user to *any other point* in the local network is a service that only incumbent LECs can provide—and it is dedicated interoffice transport that makes this service available.[108]

Currently, alternative transport is not ubiquitously available. In fact, contrary to the impression that incumbents have attempted to create, transport is not widely available in the competitive market and is only available in a limited number of discrete locations in the country, namely the most densely populated urban areas, and even then in insufficient quantity, and certainly not in most of the areas where Rhythms seeks to deploy its services. "Although new entrants are beginning to deploy alternative interoffice facilities, these facilities today remain highly

[105] Qwest Comments at 27.

[106] Ameritech Comments at 88-94; Bell Atlantic Comments at 26-32; BellSouth Comments at 50-54; GTE Comments at 57-59; SBC Comments at 45-51; US West Comments at 48-53.

[107] Local Competition Report, Industry Analysis Division, Common Carrier Bureau (December 1998) at 11.

[108] Covad Comments at 43-44 (emphasis added).

concentrated and connection to only a few central offices in a state or region."[109] In fact, "[b]efore a wholesale dedicated transport *market* can be said to exist, these competitive networks must reach a critical mass of central offices to provide other entrants a viable alternative footprint to the ILEC."[110]

The record evidence demonstrates that several competitors, including Rhythms, are dependent upon the incumbent LECs' transport and in fact have faced numerous difficulties in accessing transport. Upon surveying four Covad deployment areas with the greatest number of competitive providers, Covad concluded that even in these markets with some competitive alternatives, it is "highly dependent on ILEC dedicated transport in those markets for well over 83% of [it's] demand for interoffice transport." Similarly, as indicated in its initial comments, Rhythms has had difficulty accessing transport in at least two dozen markets and has noticed no significant change in the availability of transport in those markets since this Commission issued its *Local Competition Order* in 1996.[111] "Even in the most promising of cities for interoffice transport competition, alternative providers rarely offer alternative facilities in all, or nearly all, of the central offices in which Rhythms plans to collocate."[112] This geographic availability of transport is hardly sufficient for companies such as Rhythms that do not intend to limit their service offerings only to a few discrete customers, but rather seek to serve a full-range of customers throughout the entire country.

As AT&T has stated, "[i]t is one thing to conclude that third parties provide dedicated transport in a particular area, and quite another to find that competitive alternatives are available

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[109] Qwest Comments at 73-74
[110] Qwest Comments 73-74.
[111] Rhythms Comments at 19.
[112] Rhythms Comments at 19-20.

for specific dedicated transport routes that a CLEC requires."[113] The difficulty that Rhythms and other competitors face in acquiring transport is based on the simple fact that the ILEC has a lock on the majority of available transport. The record thus fully supports MCI's conclusion that "the vast majority of cases in which competitors might need dedicated transport, the ILEC is the only source for that transport."[114]

b. Alternative Transport is Not Available at a Cost Comparable to the ILEC's UNE Transport

Incumbents LECs have pointed to the fact that transport is available from competitive providers or that competitive LECs can deploy their own fiber.[115] This presumptive conclusion completely ignores the impact of cost on the decision to purchase fiber from a competing provider, if such fiber is available, or on the decision to self-provide by deploying fiber as needed. As the Vermont Public Service Board noted, "cost differentials can also be sufficiently significant to cause a substantial market barrier."[116] Indeed, significant cost differentials have diminished the ability of competitors to roll-out and provide their services.[117] Unbundled transport must be priced consistent with the Commission's mandated pricing methodology. CAPs and other providers, however, must recover their substantial sunk investment across a few competitive providers which leads to a higher transport price. "[O]btaining piece parts of dedicated transport is not likely to be anywhere near as cost-effective as obtaining all transport from the ILEC."[118]

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[113] AT&T Comments at 122.
[114] MCI Comments at 64.
[115] Ameritech Comments at 88-94; Bell Atlantic Comments at 26-32; BellSouth Comments at 50-54; GTE Comments at 57-59; SBC Comments at 45-51; US West Comments at 48-53.
[116] Vermont Board Comments at 12.
[117] Covad Comments at 47-48; Competitive Policy Institute Comments at 25.
[118] Qwest Comments at 77.

c. Provisioning Intervals for Alternative Transport is Not Comparable to ILEC UNE Transport

As an initial matter, the demand for transport by competitors outweighs the availability of that transport from alternative sources. Moreover, in those areas where alternative transport is available, competitors are not able to order transport and have the assurance that a sufficient supply of transport will be available for meeting transport needs. Moreover, if competitors attempted to deploy their own fiber each time they need transport, they would face insurmountable costs, as well as deployment delays. Thus, it is critical that competitors have the ability to access transport capacity that the incumbent LECs already have available in their systems.

2. Collocation is Not a Substitute for Transport

The incumbent LECs argue curiously that competitors do not need unbundled transport because of their ability to collocate in incumbent central offices and wire centers.[119] GTE claims that there is "an extremely strong correlation between collocation and the presence of transport alternatives."[120] Specifically, according to GTE once "a CLEC collocates, it may deploy its own fiber, purchase transport capacity from wholesale providers, or purchase transport capacity from the ILEC at competitive rates."[121] In support of this argument, GTE notes that only one competitor, who collocated its own equipment, requested unbundled transport in 141 GTE wire centers.[122] ILECs accordingly propose that competitors should not have unbundled access to

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[119] Ameritech Comments at 88; Bell Atlantic Comments at 31; GTE Comments at 59-63; SBC Comments at 47, 51.

[120] GTE Comments at 59

[121] GTE Comments at 59.

[122] GTE Comments at 59. Bell Atlantic attempts to create a similar correlation between collocation and transport availability. Bell Atlantic states that "'[w]hen CLEC fiber or microwave connects to an ILEC central office, then interoffice transmission services to all other ILEC central office locations also connected to CLEC fiber or microwave have competitive alternatives."

transport "in any central office with collocation if competitive interoffice transmission facilities have actually been deployed in the wire center."[123]

ILECs never explain their logic for summarily asserting that collocation in certain central offices is directly linked to the availability of alternative transport. Rhythms can only postulate that the incumbents are attempting to argue that because a competitor is able to collocate its equipment, the market dynamics for transport somehow correspondingly change to make transport ubiquitously available at a reasonable cost and in a timely manner.

This argument is a shell game. The logic here is illusive. Gaining collocation space does not eliminate the need to purchase transport at a reasonable time and at a reasonable cost. As AT&T has noted, collocation imposes far more significant costs as well as time delays than ILEC unbundled transport, and thus cannot be a reasonable alternative.[124] In fact, as Covad argues, collocation increases rather than decreases the need for ILEC transport.[125]

Because there is no direct correlation between a competitor's ability to collocate and the availability of alternative transport at a reasonable time and at a reasonable cost, there is no justification for limiting competitor's ability to access transport based upon presumptive ILEC assessments regarding which central offices competitors are likely to collocate. Not only are those limitations unnecessary, but such best such limitations would provide the incumbents with an incentive to "cook" their line density numbers in COs, perhaps by including multiple unused lines to customers' homes. This in turn, would lead to unnecessary regulatory fights concerning whether a central office where competitors sought transport fell within the threshold parameters.

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[123] Ameritech Comments at 6 and 18.

[124] AT&T Comments at 119.

[125] "Covad's blanket collocation strategy will make it *ever-increasingly dependent* upon ILEC transport. The simple fact is that the physical collocation process—however bumbling the ILECs may make it—occurs much faster than CLEC fiber networks are built." Covad Comments at 44-45.

3. Special Access Tariffs and Expanded Interconnection Agreements Do Not Provide Comparable, Cost-Effective Alternatives to Unbundled Transport

Incumbent LECs have also argued that they should not be required to provide unbundled transport because competitors are able purchase transport out of special access tariffs or expanded interconnection agreements.[126] This argument misses entirely the Supreme Court's point in its directive to consider alternatives. Alternative means a source *other than the ILEC*. Thus, it is completely ludicrous that the incumbents would suggest that competitors have a transport alternative in the form of their special access tariffs and expanded interconnection agreements.

Furthermore, an aspect of both availability and impairment is cost. Because the incumbents monopolize transport, the prices of the transport in their special access tariffs and expanded interconnection agreements are much higher than those that would prevail in a competitive market, as benchmarked by TELRIC-based prices. Thus, the FCC adopted TELRIC to ensure that new entrants could buy elements like transport at a competitive market price. Competitors have no such price assurances for transport made available through access tariffs and expanded interconnection agreements.

Other carriers have also recognized that transport via special access tariff or expanded interconnection agreements is not comparable on a price level to unbundled ILEC transport.[127] For instance, AT&T noted in its comments that BellSouth's cost model indicated that special access is not a viable substitute for a UNE.[128] For Covad, a switch from unbundled transport to tariff transport would increase Covad's transport costs by 353%.[129] Unless competitors can

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[126] GTE Comments at 61.
[127] Covad Comments at 45-48.
[128] AT&T Comments at 125.
[129] Covad Comments at 48.

access transport at a reasonable price, the fact that the ILEC would like to impose higher prices on competitors via special access tariffs and expanded interconnection agreements is irrelevant.

4. Sporadic Evidence of Competitor Use of Alternative Transport is Not Indicative of Widespread Availability

The Commission should also reject arguments that unbundled transport should be unavailable in central office where another competitor has managed to purchase transport from a competitive access provider.[130] The notion of pointing to one competitor's good fortune as an indication that all competitors will benefit similarly is just not rational. As Qwest has stated, "[i]t would defy reason and commercial reality for the Commission to rely upon the existence of competing facilities between two end offices as evidence that there is a wholesale market for the dedicated transport element between those two offices."[131] There is just not enough competitive transport to go around. Similarly, as Rhythms has already stated, "even where an alternative CAP does have facilities available, current demand often results in insufficient capacity and lengthy delays before facilities become available."[132]

D. Unbundled OSS is Central to Competitor's Ability to Offer Services, and Must be Made Available on an Unbundled Basis

OSS includes the databases or facilities used in the provision of a telecommunications service.[133] Generally, OSS encompasses five stages in competitors' efforts to offer services: (1)

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[130] Ameritech Comments at 6,88; Bell Atlantic Comments at 31; and BellSouth Comments at 53.

[131] Qwest Comments at 76.

[132] Rhythms Comments at 20. Ameritech argues that, as a technical matter, it is not possible to unbundle transport between ILEC switch facilities because transport cannot be separated from switching.[132] However, by arguing that some transport facilities are inseparable from switching facilities, incumbent LECs miss the key point. CLECs need access to transport to and from ILEC facilities, and this can occur either on existing transport facilities or on newly-created facilities. Thus, to the extent that incumbents argue that certain transport facilities cannot be separated from switching, then the incumbents should provide an alternative form of transport from the ILECs' facilities. Ameritech Comments at 95.

[133] *Local Competition Order* ¶ 517.

pre-ordering; (2) ordering; (3) provisioning; (4) maintenance and repair; and (5) billing. As such, OSS "is a precondition for access to all other UNEs."[134]

There is strong consensus that OSS is not proprietary and thus should be evaluated under the impair standard.[135] While the actual software code may well be proprietary, no CLEC requires access to the code to use the ILECs' OSS. Moreover, what the software does or contains is not proprietary. That is, the *use* of the ILECs' OSS does not involve anything that is proprietary, even if the code that creates the OSS *is* prorpietary. Even if OSS were proprietary, OSS is so wed to competitor's ability to offer services, that it would meet the necessity standard. As the California PUC stated, "[i]t is so essential to competition that if the Commission determines access to operations support systems is proprietary in nature, this network element would satisfy the 'necessary' standard as well."[136]

1. OSS Access is an Unquestionably Critical Component of Competitor's Operations

Many commenters have agreed with Rhythms that OSS access is of unquestionable importance to new entrants' ability to provide services.[137] "There appears to be no disagreement among regulators that nondiscriminatory access to incumbent LEC operations support systems is a near absolute prerequisite to competition in the local exchange service market."[138] In fact, as the California PUC states, "the availability of [OSS] is where the rubber meets the road in the development of a competitive telecommunications market. Nothing can 'impair' a competitor's

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[134] ALTS Comments at 58.

[135] MCI Comments at 67-70 (advocate the impair standard); Qwest Comments at 86 (advocate the impair standard).

[136] Iowa Utilities Board Comments at 7.

[137] ALTs Comments at 59; California Public Utilities Commission Comments at 5; COMPTEL Comments at 45; Covad Comments at 53-54; Illinois Commerce Commission Comments at 16; Iowa Utilities Board Comments at 7; Qwest Comments at 84; Level 3 Communications Comments at 16-17; MCI Comments at 67-70; MGC Comments 27-28; NorthPoint Comments at 20; and Texas Public Utilities Commission at 19.

[138] Iowa Utilities Board Comments t 7.

successful entry into a market more effectively than slow, inefficient and inaccurate methods for processing customer orders and service requests."[139] In spite of the critical role that OSS plays in the provision of competitive services, ILECs have systematically refused to provide CLECs with nondiscriminatory access to their OSS. "In the three years since passage of the 1996 Act, one of the most pervasive and persistent problems has been competitor access to the manual and electronic systems used by the ILECs for pre-ordering, ordering, provisioning, maintenance and billing."[140] Simply put, without access to unbundled OSS, competitors would not be able to compete.

There are two primary reasons why ILEC OSS must be available on an unbundled basis. First, as Rhythms discussed previously, the information contained in the ILECs' systems and databases is one-of-a-kind information. There is no other source that a competitor can go to in order to determine the type of information that is contained within the ILECs' databases and systems. "[T]here is no substitute for the ILECs' information on their own unbundled network elements and retail services. Access to that information can only occur through the ILECs' own OSS."[141]

Second, the ability of competitors to utilize any of the other network facilities to offer services depends on access to OSS. For example, the right to buy a loop cannot be fully exercised unless a competitor can determine whether that loop is usable for the purposes it is intended, place an order for that loop in a reasonable period of time, and request timely repair of that loop in the event of failure. As AT&T has emphasized, "[a]ccess to OSS is complementary to all other unbundled network elements. Indeed, those elements will not truly be available to

[139] California PUC Comments at 5-6.
[140] California PUC Comments at 5.
[141] MCI Comments at 69. (citation omitted)

CLECs unless CLECs can access the incumbent's OSS ."[142] Third, because the ILEC relies heavily on its own unique OSS information (the data, which is not proprietary) to provide its services, parity of access to this information by competitors is required in order for competitors to have the opportunity to match the ILEC's services in quality and performance.

2. The OSS Access that Incumbents Provide to Competitors Falls Short of Placing Competitors on An Equal Footing With the Incumbent

Although most commentators have recognized the importance of OSS, some incumbent LECs have attempted to limit competitors' access to OSS in several ways, even while simultaneously appearing to be in support of including OSS as a UNE. SBC "agrees that ILECs should provide CLECs access to all the ILEC OSS functions that *our current systems are capable of providing*."[143] This position is flawed in two ways.

First, limiting OSS access to the ILECs' current capabilities is improper. This limitation neutralizes the very purpose of making OSS available to CLECs. OSS should be made available to allow competitors to compete on an equal footing with the incumbent and have access to, the same information, at the same time, and at the same level of quality as the incumbent. Currently the ILECs' systems do not sufficiently accommodate competitors. "Almost all ILEC OSS systems today are inadequate to handle basic CLEC needs."[144] One of the reasons why ILEC OSS is inadequate is that they do no provide competitors with the same information that the incumbent access nor is that information provided to competitors as quickly as the incumbent providers the information to itself. For instance, there is no means whereby DSL competitors can query the incumbents' systems electronically while interacting with potential customers in order to determine whether the customers' loops are capable of DSL services and to inform that

[142] AT&T Comments at 134.
[143] SBC Comments at 56 (emphasis added).

customer of service availability. In contrast, the competitors have provided this access to themselves.[145] Thus, the same systems that ILEC's use in order to access privy information needed to serve customers should be altered to allow competitors the same type of access.[146]

Second, if OSS access is limited to current capabilities, the ILECs will have an incentive to change their systems or remove certain information, such as loop make-up data, from their systems and then claim that competitors are not entitled to these additional systems. To avoid this type of discrimination, the Illinois Commission notes that, "OSS can also record the incumbent LEC's activities and be used as a means of comparison of service activities between the incumbent LEC and the CLEC to ensure that discrimination is not occurring."[147] Thus, in order to ensure that competitors have access to the same systems as the ILECs, and to ensure parity of access, it is critical that the Commission require the incumbents to unbundle their OSS.[148]

3. The Commission Should Reject ILEC Attempts to Undermine Competitors' OSS Access By Placing Limitations on Competitors Use of OSS

Incumbent LECs have argued that competitors should only access OSS subject to their purchase of a UNE or resale from the incumbent.[149] For example, GTE and US West contend that competitors should not be able to access the ILECs' OSS in order to provision their own loops or the loops of another CLEC.[150] One problem with this limitation is that it excludes other instances where it is also critical that competitors have access to OSS. One example of such an

[144] MCI Comments at 69.
[145] Covad Comments at 53.
[146] Covad Comments at 54.
[147] Illinois Commerce Commission Comments at 14.
[148] Finally, the SBC position is also flawed because SBC does not even allow CLEC access to all of the information that its "current systems are capable of providing." Rather, SBC decides, for example, which data fields it will allow CLECs to see, and which it will not.
[149] GTE Comments at 71; SBC Comments at 56-57; US West at 41.

instance is interconnection. "CLECs need access to ILECs OSS, whether they are reselling ILEC products, leasing unbundled elements from the ILECs' network, or simply interconnecting to the ILECs' network."[151] Another inadequacy of limiting OSS to UNE or resale purchase is that this requirement does not reflect the reality of the role that OSS plays in competitors' decisions to order UNEs.

A significant part of OSS is the pre-ordering process, whereby competitors decide whether or not an ILEC facility is appropriate for serving a particular customer. For instance, it is necessary to assess whether or not the loops that serve a customer's premises contain of DSL interferes, such as load coils, bridged taps, DAMLs, repeaters, pairgains and DLC systems, *before* purchasing those loops. By utilizing the ILEC's OSS, Rhythms would be able to assess this data and determine whether it should purchase the facility in question. If after accessing OSS to review the make-up data, Rhythms discovered that a particular facility or group of facilities were not appropriate for certain DSL services, Rhythms would not want to order those facilities. Thus, this decision on whether to purchase cannot be made unless Rhythms has access information about the facilities via OSS.

4. DSL Providers Must Access ILEC OSS in Order to Review Key Loop Data

As Rhythms emphasized in its initial comments, the pre-ordering stage is particularly important for DSL providers.[152] The Commission has already recognized that, "[i]f new entrants are to have a meaningful opportunity to compete, they must be able to determine during the pre-ordering process as quickly and efficiently as the incumbent, whether a loop is capable of

[150] GTE Comments at 71-72; US West Comments at 41.
[151] MCI Comments at 68.
[152] Covad Comments at 53-54.

supporting xDSL-based services."[153] It is at the pre-ordering stage where DSL providers (both competitors and incumbents) determine whether or not the loop facilities that serve their potential customers are capable of carrying DSL services, and if so, what type. In reaching this determination, DSL providers must asses the characteristics of a loop, and in particular, whether or not the loop contains load coils, repeaters, bridged taps, DLC systems, DAMLs and pairgains. In addition, DSL providers must also consider the length and wire gauge of the loop.

All of this information is a part of OSS, and indeed lies currently in ILEC databases and systems. In fact, ILECs access this information in order to provide their DSL services. Moreover, without this information in a real-time electronic format, DSL providers cannot effectively react to their customers' needs at the same time the incumbent is able to react to its own customers. As the Commission well knows, the ability to match the incumbent's services in timely delivery is key. "If it takes longer to provision service to customers of a competitive carrier, the competitor will lose business to the LEC."[154] If competitors are not able to access information via OSS at the same time that the incumbents are able to access that information, competitors reaction to this information will be slower than that of the incumbent, and this delay will create the false impression to customers that competitors' services are inferior. Denial of OSS parity "introduces errors, causes delays and uncertainty that both discourage customers from choosing a CLEC and undermine CLEC marketing campaigns, and creates a negative image for customers, all of which inflate CLECs' customer acquisition costs."[155] Unquestionably, these are adverse effects that would result in lost sales and impair competitors' services.

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[153] *Memorandum Opinion and Order* ¶ 56
[154] California Public Utilities Commission Comments
[155] MCI Comments at 69.

5. Real-Time, Electronic OSS Access Is Required for Competitors to Have an Equal Opportunity to Compete with the ILEC

GTE maintains that competitors should not have "retail use of ILEC OSS" in order to provide service to their customers.[156] In support, GTE points to the fact that there are multiple OSS vendors and that CLECs can purchase these systems in order to serve their customers.[157] The error in this argument is that it presents the vendor-provided ability of competitors to create their own interfaces as substitute for the key information that is contained with ILEC OSS systems.

Competitors' own OSS systems cannot possibly contain the information that the ILECs' OSS systems contain, which is essential to be able to offer services. As discussed previously, it is very important that competitors have the ability to review loop make-up information while interacting with their customers in order to determine whether the loop is capable of DSL services, and if so, to inform that customer of the expected service capabilities and delivery dates. No OSS provided by a competitive vendor will have this loop make-up information, as the information is ILEC-generated based on the ILECs' design and maintenance of its own equipment.

Similarly, as COMPTEL states, ILEC OSS is necessary to access maintenance histories and service interval information.[158] Again, none of this information would be available in a commercial ILEC OSS system. There is just no way of circumventing the fact that much of the OSS information that competitors need to access is ILEC owned and ILEC specific, and that only way to access this information is via the incumbent's OSS. Moreover, just as the ILEC uses

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[156] GTE Comments at 71,
[157] GTE Comments at 71
[158] COMPTEL Comments at 45

this key information that is only available to the ILEC in order to serve its retail customers, so too should competitors be able to use the same information to serve its retail customers.

E. Incumbent LECs Must Unbundle Advanced Services Equipment in Central Offices, Remote Terminals and Controlled Environmental Vaults in Which Competitors Have Been Denied Collocation of Their Own Advanced Services Equipment.

Several commenters have argued that digital subscriber line access multiplexers ("DSLAMs"), used for the provision of advanced services, should not be unbundled.[159] Several of the ILECs concur that a general matter, DSLAMs are "freely available at market prices from sources other than incumbent LECs."[160] As a major purchaser of DSLAMs, Rhythms agrees that DLSAMs should not — except in the limited situations outlined here and in our initial comments— be subject to mandatory unbundling.

DSLAMs are not proprietary elements,[161] and as such the determination of whether they must be unbundled is governed by the "impair" standard. In most instances competitors' services will not be impaired if they are denied access to the ILEC's DSLAMs. This equipment is available from a variety of competitive vendors and competitors have been able to purchase DSLAMs. DSL providers purchase DSLAMs and locate them at the end of their customers' copper loops at the ILEC facilities in order to provide service.

There are, unfortunately, a few instances where competitive DSL providers are not able to install their own DSLAMs at the end of the copper loop at the ILECs facilities. Specifically, competitors are unable to install their own DSLAM equipment when the incumbent has

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[159] Ameritech Comments at 124; Bell Atlantic Comments at 40; BellSouth Comments at 32-33; SBC Comments at 73; US West Comments at 58.

[160] Similarly, Bell Atlantic states that "[c]competitive DSL suppliers are thriving using their own network equipment (DSLAMS)." Bell Atlantic Comments, Crandall Declaration at 23. Also, the Ohio Public Utilities Commission has argued that ILEC provisioning of DSLAMs would actually require "network improvement or network modification." Ohio PUC Comments at 16.

determined that there is no space inside of a central office, a remote terminal or controlled environmental vault for a CLEC to collocate this equipment. However, DSL providers need to be able to install equipment in these locations because it is at these locations where providers access the end of customer's copper loop. Because DSL service requires access to the copper loop, the inability to access a location to place a DSLAM at the end of the loop is a significant impediment. The instance where this most often occurs is when competitors seek to place their equipment in DLC vaults, where the end of the customer's copper loop meets fiber transmission. However, when competitors have attempted to place their DSLAMs in these locations, ILECs have denied competitors this ability. Because DLC systems prevent the deployment of most DSL technologies, DSL providers (CLECs and ILECs) must find a way to access the end of the copper loop that serves these customers. In absence of the ability to place their own equipment at the DLC vault or other exhausted collocation facilities and remote terminals, the competitors have no other choice but to use the ILECs' DSLAM already located in those vaults, offices and terminals. As NorthPoint states, "where loops and collocation are unavailable to a requesting competitive LEC . . . it is impossible for competitive LECs to serve end-users."[162] Thus, in order to offer services to customers served by DLC systems, competitors must connect with a DSLAM already in the vault, namely the ILECs' DSLAM.

CONCLUSION

In order to ensure competition, particularly in the advanced services market, the Commission should establish a nationwide minimum list of unbundled network elements.

[161] As Rhythms indicated in its initial comments, DSLAMs are manufactured and sold by commercial vendors and are available to any carrier.

[162] NorthPoint Comments at 18.

Specifically, the Commission should require ILECs to provide loops, including the features and functionalities of xDSL-capable loops, NIDs, transport facilities and OSS.

Respectfully submitted,

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